

CLAIMS

1. In a brazed metal heat exchanger core having an elongated structural member the structural unity of which it is desired to maintain prior to the braze process, but which it is desired to later sever, and in which said elongated member is assembled with said core and with a predefined surface area thereof oriented substantially vertically during the braze process at a predetermined braze temperature and duration, said elongated member being formed from a base alloy with a melting temperature above said predetermined braze temperature and is clad with a braze material that melts and flows at a temperature below said predetermined braze temperature, said method comprising the steps of,

providing a series of adjacent voids through said predefined surface area prior to assembling said core across the width of said reinforcement member, with webs between said voids having just sufficient width and strength to maintain the structural integrity of said elongated member during core assembly, with adjacent edges of said voids defining said webs being shaped such that said webs converge smoothly to a narrowest point and then diverge, moving vertically downwardly,

assembling said core,

brazing said core at said predetermined temperature and duration, during which melted braze material runs vertically downwardly, guided by said void edges and continually across said webs, said webs being sufficiently thin such that, during the braze process, running braze material erodes and severs said webs and thereby severs said elongated member completely.

2. In a brazed metal heat exchanger core having an elongated structural member the structural unity of which it is desired to maintain prior to the braze process, but which it is desired to later sever, and in which said elongated member is assembled with said core and oriented substantially vertically during the braze process at a predetermined braze temperature and duration, said member having a base wall and at least one side

wall extending outwardly therefrom that is formed from a base alloy with a melting temperature above said predetermined braze temperature and is clad with a braze material that melts and flows at a temperature below said
35 predetermined braze temperature, said method comprising the steps of,
cutting a slot across said base wall aligned with said predefined surface area prior to assembling said core,
providing a series of adjacent voids in said side wall predefined surface area, aligned with said base wall slot, prior to assembling said core
40 across the width of said side wall with webs between, said webs having just sufficient width and strength to maintain the structural integrity of said side wall during core assembly, adjacent edges of said voids defining said webs being shaped such that said webs converge smoothly to a narrowest point and then diverge, moving vertically downwardly along side wall,
45 assembling said core,
brazing said core at said predetermined temperature and duration, during which melted braze material runs vertically downwardly, guided by said void edges and continually across said webs, said webs being sufficiently thin such that, during the braze process, running braze material to
50 erodes and severs said webs and thereby severs said elongated reinforcement completely in conjunction with said slot.